



Sheet 1 of 5 Sheets

U.S. Department of Commerce, Patent and Trademark Office	Atty Docket No.	Application No.
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	M-11147-1C US 10/674,652	10/008,482
(Use several sheets if necessary)	Applicants	Confirmation No.
	Zare et al.	8199
	Filing Date	Group
	August 8, 2001	1723

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U.S. Patent Documents

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
EGT	1	4,323,439	4/6/82	O'Farrell	204	180G	
EGT	2	4,617,102	10/14/86	Tomblin et al.	204	299R	
EGT	3	5,085,756	2/4/92	Swedberg	204	299R	
EGT	4	5,116,471	5/26/92	Chien et al.	204	180.1	
EGT	5	5,202,010	4/13/93	Guzman	204	299R	
EGT	6	5,340,452	8/23/94	Brenner et al.	204	180.1	
EGT	7	5,423,966	6/13/95	Wiktorowicz	204	182.8	
EGT	8	5,453,382	9/26/95	Novotny et al.	436	178	
EGT	9	5,766,435	6/16/98	Liao et al.	204	451	
EGT	10	5,800,692	9/1/98	Naylor et al.	204	601	
EGT	11	6,136,187	10/24/00	Zare et al.	210	198.2	
EGT	12	5,772,875	6/30/98	Pettersson et al.	210	198.2	
EGT	13	3,568,840	12/24/68	Hashimoto, et al.	210	198.2	
EGT	14	3,757,490	9/11/73	Ma	55	67	
EGT	15	5,308,495	5/3/94	Avnir et al.	210	656	
EGT	16	5,316,680	5/31/94	Frechet et al.	210	635	
EGT	17	5,334,310	8/2/94	Frechet et al.	210	198.2	
EGT	18	5,552,994	6/4/96	Frechet et al.	210	635	
EGT	19	5,647,979	7/15/97	Liao et al.	210	198.2	
EGT	20	5,667,674	9/16/97	Hanggi et al.	210	198.2	
EGT	21	5,719,322	2/17/98	Lansbarkis et al.	73	23.39	
EGT	22	5,728,296	3/17/98	Hjerten te al.	210	198.2	
EGT	23	5,728,457	3/17/98	Frechet et al.	428	310.5	
EGT	24	5,759,405	6/2/98	Anderson, Jr. et al.	210	656	
EGT	25	5,858,241	1/12/99	Dittmann et al.	210	656	
EGT	26	4,675,300	6/23/87	Zare et al.	436	172	
EGT	27	5,599,445	2/4/97	Betz et al.	210	198.2	
EGT	28	5,637,135	6/10/97	Ottenstein et al.	96	101	
EGT	29	3,808,125	8/25/72	Good	210	198.2	
EGT	30	5,135,627	8/4/92	Soane	204	182.8	
EGT	31	5,453,185	9/26/95	Frechet et al.	210	198.2	

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Sheet 2 of 2 Sheets

ECT	32	3,503,712	5/18/66	Sussman	23	252	
ECT	33	5,116,495	5/26/92	Prohaska	210	198.2	
ECT	34	3,878,092	4/15/75	Fuller	210	31C	

Foreign Patent Documents

							Translation	
ECT		Document	Date	Country	Class	Subclass	Yes	No
ECT	35	WO 00/49396	8/24/00	WIPO	210	198.2		X
ECT	36	EP 0 779 512	06/18/97	EP	210	198.2		X
ECT	37	EP 0 439 318	7/31/91	EP	210	198.2		

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

ECT	39	C. Yu et al., "Towards Stationary Phases for Chromatography on a Microchip: Molded Porous Polymer Monoliths Prepared in Capillaries by Photoinitiated In Situ Polymerization as Separation Media for Electrochromatography," <i>Electrophoresis</i> , Vol. 21, 2000, pp. 120-127.
ECT	40	J. Quirino et al., "Sweeping of Analyte Zones in Electrokinetic Chromatography," <i>Analytical Chemistry</i> , Vol. 71, No. 8, April 15, 1999, pp. 1638-1644.
ECT	41	M. Taylor et al., "Analysis of Corticosteroids in Biofluids by Capillary Electrochromatography with Gradient Elution," <i>Analytical Chemistry</i> , Vol. 69, No. 13, July 1, 1997, pp. 2554-2558.
ECT	42	D.A. Stead et al., "Capillary Electrochromatography of Steroids Increased Sensitivity by On-Line Concentration and Comparison with High-Performance Liquid Chromatography," <i>Journal of Chromatography A</i> , Vol. 798, 1998, pp. 259-267.
ECT	43	Y. Zhang et al., "High-Efficiency On-Line Concentration Technique of Capillary Electrochromatography," <i>Analytical Chemistry</i> , Vol. 72, No. 22, November 15, 2000, pp. 5744-5747.
ECT	44	T. Tegeler et al., "On-Column Trace Enrichment by Sequential Frontal and Elution Electrochromatography. 1. Application to Carbamate Insecticides," <i>Analytical Chemistry</i> , Vol. 73, No. 14, July 15, 2001, pp. 3365-3372.
ECT	45	F. E. P. Mikkers et al., "Concentration Distributions in Free Zone Electrophoresis," <i>Journal of Chromatography</i> , Vol. 169, February 1, 1979, pp. 1-10.
ECT	46	R.-L. Chien et al., "On-Column Sample Concentration Using Field Amplification In CZE," <i>Analytical Chemistry</i> , Vol. 64, No. 8, April 15, 1992, pp. 489A-496A.
ECT	47	J. Quirino et al., "Exceeding 5000-Fold Concentration of Dilute Analytes in Micellar Electrokinetic Chromatography," <i>Science</i> , Vol. 282, October 16, 1998, pp. 465-468.
ECT	48	C. Yang et al., "Electrically Driven Microseparation Methods for Pesticides and Metabolites. II: On-line and Off-line Preconcentration of Urea Herbicides in Capillary Electrochromatography," <i>Electrophoresis</i> , Vol. 20, 1999, pp. 2337-2342.
ECT	49	M. Dulay et al., "Preparation and Characterization of Monolithic Porous Capillary Columns Loaded with Chromatographic Particles," <i>Analytical Chemistry</i> , Vol. 70, No. 23, December 1, 1998, pp. 5103-5107.
ECT	50	M. Dulay et al., "Photopolymerized Sol-Gel Monoliths for Capillary Electrochromatography," <i>Analytical Chemistry</i> , Vol. 73, No. 16, August 15, 2001, pp. 3921-3926.
ECT	51	J. Quirino et al., "New Strategy for On-Line Preconcentration in Chromatographic Separations," manuscript. UNDATED
ECT	52	J. Quirino et al., "On-Line Preconcentration in Capillary Electrochromatography Using a Porous Monolith, Solvent Gradient and Sample Stacking," manuscript. UNDATED
ECT	53	M. Kato et al., "Photopolymerized Sol-Gel Frits for Packed Columns in Capillary Electrochromatography," <i>Journal of Chromatography A</i> , Vol. 924, 2001, pp. 187-195.

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et al. 10/674,652 10/000,482

Sheet 3 of 5 Sheets

54	J.-R. Chen et al., "Macroporous Photopolymer Frits for Capillary Electrochromatography," <i>Analytical Chemistry</i> , Vol. 72, No. 6, March 15, 2000, pp. 1224-1227.
55	C. Viklund et al., "Molded Macroporous Poly(Glycidyl Methacrylate-Co-Trimethylolpropane Trimethacrylate) Materials with Fine Controlled Porous Properties: Preparation of Monoliths Using Photoinitiated Polymerization," <i>Chem. Mater.</i> , Vol. 9, No. 2, 1997, pp. 463-471.
56	M. Dulay et al., "Bonded-Phase Photopolymerized Sol-Gel Monoliths for Reversed Phase Capillary Electrochromatography," <i>J. Sep. Sci.</i> , Vol. 25, 2002, pp. 3-9.
57	M. Kato et al., "Effect of Preparatory Conditions on the Performance of Photopolymerized Sol-Gel Monoliths for Capillary Electrochromatography," <i>Journal of Chromatography A</i> , Vol. 961, 2002, pp. 45-51.
58	M. Kato et al., "Enantiomeric Separation of Amino Acids and Nonprotein Amino Acids Using a Particle-Loaded Monolithic Column," <i>Electrophoresis</i> , Vol. 21, 2000, pp. 3145-3151.
59	J. Quirino et al., "On-Line Preconcentration in Capillary Electrochromatography Using a Porous Monolith Together with Solvent Gradient and Sample Stacking," <i>Anal. Chem.</i> , Vol. 73, 2001, pp. 5557-5563.
60	J. Quirino et al., "Strategy for On-Line Preconcentration in Chromatographic Separations," <i>Anal. Chem.</i> , Vol. 73, 2001, pp. 5539-5543.
61	K. Morishima et al., "Toward Sol-Gel Electrochromatographic Separations on a Chip," <i>J. Sep. Sci.</i> , Vol. 25, 2002, pp. 1226-1230.
62	M.J. Hilhorst, et al., "Sensitivity Enhancement in Capillary Electrochromatography by On-Column Preconcentration," <i>Chromatographia</i> 2001, 53, February (No. 2), pp. 190-196.
63	Woo, et al., "Photopolymerization of Methyl Methacrylate with Primary Aryl- and Alkylsilanes," <i>Bulletin of the Korean Chemical Society</i> , Vol. 16, No. 11, ISSN 0253-2964, Nov. 20, 1995, pages 1057-1059.
64	Cikalo, et al., "Capillary Electrochromatography," <i>Analyst</i> , July 1998, Vol. 123 pp. 87R-102R.
65	Quirino, et al., "Sample Stacking of Cationic and Anionic Analytes in Capillary Electrophoresis," <i>Journal of Chromatography, A</i> , 902 2000, pp. 119-135.
66	Quirino, et al. "Sweeping of Neutral Analytes in Electrokinetic Chromatography with High-Salt-Containing Matrixes," <i>Analytical Chemistry</i> , vol. 72, No. 8, April 15, 2000.
67	Chen, et al., "Semipreparative Capillary Electrochromatography," <i>Analytical Chemistry</i> , Vol. 73, No. 9, May 1, 2001. 1987-1992
68	Colon, et al., "Packing Columns for Capillary Electrochromatography," <i>Journal of Chromatography, A</i> , 887 (2000) pp. 43-53.
69	Svec, et al., "Design of the Monolithic Polymers used in Capillary Electrochromatography Columns," <i>Journal of Chromatography, A</i> , 887 (2000) pp. 3-29.
70	Constantin, et al., "Preparation of Stationary Phases for Open-Tubular Capillary Electrochromatography Using the Sol-Gel Method," <i>Journal of Chromatography, A</i> , 887 (2000) pp. 253-263.
71	Tan, et al., "Preparation and Evaluation of Bonded Linear Polymethacrylate Stationary Phases for Open Tubular Capillary Electrokinetic Chromatography," <i>Analytical Chemistry</i> , Vol. 69, No. 4, Feb. 15, 1997. pages 581-586
72	Chirica, et al., "Fritless Capillary Columns for HPLC and CEC Prepared by Immobilizing the Stationary Phase in an Organic Polymer Matrix," <i>Analytical Chemistry</i> , Vol. 72, No. 15, August 1, 2000, pp. 3605-3610.
73	Palm, et al., "Macroporous Polyacrylamide/Poly(ethylene glycol) Matrixes as Stationary Phases in Capillary Electrochromatography," <i>Analytical Chemistry</i> , Vol. 69, No. 22, Nov. 15, 1997, pp. 4499-4507.

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APR 11 2003
TC 1700



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~~10/000,402~~ "Sol-Gel Electroosmotic" Sheet 4 of 5 Sheets

EGT	74	Hayes, et al., "Sol-Gel Monolithic Columns with Reversed Electroosmotic-Flow for Capillary Electrochromatography," <i>Analytical Chemistry</i> , Vol. 72, No. 17, September 1, 2000, pp. 4090-4099.
EGT	75	Mol, et al., "Trace Level Analysis of Micropollutants in Aqueous Samples using Gas Chromatography with On-Line Sample Enrichment and Large Volume Injection," <i>Journal of Chromatography A</i> , 703 (1995) pp. 277-307.
EGT	76	Quirino, et al., "Approaching a Million-Fold Sensitivity Increase in Capillary Electrophoresis with Direct Ultraviolet Detection: Cation-Selective Exhaustive Injection and Sweeping," <i>Analytical Chemistry</i> , Vol. 72, No. 5, March 1, 2000, pp. 1023-1030.
EGT	77	Rudge, et al., "Solute Retention in Electrochromatography by Electrically Induced Sorption," <i>AIChE Journal</i> , May 1993, Vol. 39, No. 5, pp. 797-808.
EGT	78	Kitagawa, et al., "Voltage-Induced Sample Release from Anion Exchange Supports in Capillary Electrochromatography," <i>Analytical Sciences</i> , June 1998, Vol. 14, pp. 571-575.
EGT	79	Josic, et al., "Monoliths as Stationary Phases for Separation of Proteins and Polynucleotides and Enzymatic Conversion," <i>Journal of Chromatography B</i> , 752 (2001) pp. 191-205.
EGT	80	Peters, et al., "Molded Rigid Polymer Monoliths as Separation Media for Capillary Electrochromatography," <i>Analytical Chemistry</i> , Vol. 69, No. 17, September 1, 1997 pp. 3646-3649
EGT	81	Dulay, et al., "Automated Capillary Electrochromatography: Reliability and Reproducibility Studies," <i>Journal of Chromatography A</i> , 725 (1996) pp. 361-366.
EGT	82	Brinker, et al., "Sol-Gel Science: The physics and Chemistry of Sol-Gel Processing," <i>Academic Press</i> , San Diego, pp. 372-385, 408-411, 458-459 1990.
EGT	83	Badini, et al., "Impregnation of a pH-Sensitive Dye into Sol-Gels for Fibre Optic Chemical Sensors," <i>Analyst</i> , 120, pp. 1025-1028, April 1995.
EGT	84	Snyder, Introduction to Modern Liquid Chromatography, <i>John Wiley & Sons, Inc.</i> , New York, 1979, pp. 145-147.

Examiner THEKORN

Date Considered APRIL 24, 2003 June 4, 2004

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.

U.S. Department of Commerce, Patent and Trademark		Atty. Docket No.	Application No.
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		STNB.055US1	10/008,482
		Applicant(s)	
		Richard N. Zare	
		Filing Date	Group
		November 13, 2001	1723

U.S. Patent Documents

*Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
EGT	4,790,919	12/13/88	Baylor, Jr.	204	182.8	
EGT	5,200,150	4/6/93	Rose, Jr.	422	62	
EGT	5,916,427	6/29/99	Kirkpatrick	204	469	

U.S. Published Patent Application Documents

*Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate

Foreign Patent Documents

							Translation	
	Document	Date	Country	Class	Subclass		Yes	No
EGT	WO 99/30147	6/17/99	PCT					

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

EGT	International Search Report mailed October 25, 2002?
EGT	Boughtflower et al., "Capillary Electrochromatography - Some Important Considerations in the Preparation of Packed Capillaries and the Choice of Mobile Phase Buffers," <i>Chromatographia</i> , Vol. 40, No. 5/6, March 1995, pp. 329-335.

Examiner THEKORN Date Considered June 4, 2004

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.